REMARKS

Claims 1-28 are pending in the application. By this Amendment, independent claims 10 and 17-21 are amended for clarity and new claims 22-28 are added. Various amendments are made for clarity and are unrelated to issues of patentability.

Applicants gratefully acknowledge the Office Action's indication that claims 1-9 and 16-18 are allowed. New claims 27-28 depend from claim 6 and therefore define patentable subject matter at least for this reason.

The Office Action rejects claims 19-21 under 35 U.S.C. §102(e) over Lin Li et al. article "A Crosstalk Aware Interconnect with Variable Cycle Transmission" (hereafter Li). The Office Action also rejects claims 10-15 under 35 U.S.C. §103(a) over Li and U.S. Patent 5,632,029 to Bruce et al. (hereafter Bruce). The rejections are respectfully traversed.

Independent claim 10 recites a delay circuit coupled to a bus invert encoder circuit and a first interconnect stage to delay signals on a first one of the first plurality of parallel interconnects as compared to signals on a second one of the first plurality of parallel interconnects, the signals being delayed based on switching activities of sampling patterns of signals to be applied to the first and second ones of the first plurality of parallel interconnects.

Li and Bruce do not teach or suggest all these features of independent claim 10. More specifically, Li describes sending data over several data cycles rather than designing the clock cycle to fit a worse case scenario. Li's DYN circuit changes a number of required cycles for transmission. See the Abstract, lines 7-10 and page 2, left column, lines 10-13. For example, for a specific worst case delay, a different number of clock cycles may be used. This differs from

Serial No. 10/813,084 Reply to Office Action dated May 2, 2005

delaying a transmission start time of adjacent interconnect to reduce coupling and to reduce an overall delay. See the various descriptions in the present specification.

Li does not teach or suggest a delay circuit to delay signals on a first one of a plurality of interconnects as compared to signals on a second one of a plurality of interconnects in which the signals being delayed are based on switching activities of sampling patterns of signals to be applied to first and second ones of the first plurality of interconnects. Rather, Li merely changes a required number of cycles for transmission. Further, Li operates based previous data and current data to be transmitted on one signal line. See page 2, lines 1-4 and 8-10. Additionally, Li's determined number of cycles is not based on switching activities of the sampling patterns of signals to be applied to the first and second ones of the first plurality of parallel interconnects. Thus, Li does not teach or suggest the features recited in independent claim 10. Bruce does not teach or suggest the features of independent claim 10 missing from Li. Thus, independent claim 10 defines patentable subject matter at least for this reason.

Independent claim 19 defines patentable subject matter for at least similar reasons. That is, independent claim 19 recites a delay circuit coupled to the bus invert encoder circuit and the first interconnect stage to delay signals on the first interconnect as compared to signals on the second interconnect, the signals being delayed based on switching activities of signals to be applied to the first interconnect and the second interconnect. Li and Bruce do not teach or suggest these features for at least the reasons set forth above.

Accordingly, each of independent claims 10 and 19 define patentable subject matter.

Claims 11-14 and 24-26 depend from claim 10, claims 20-23 depend from claim 19 and

therefore define patentable subject matter for at least this reason. In addition, the dependent

claims also recite features that further and independently distinguish over the applied references.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition

for allowance. Favorable consideration and prompt allowance of claims 1-28 are earnestly

solicited. If the Examiner believes that any additional changes would place the application in

better condition for allowance, the Examiner is invited to contact the undersigned attorney,

David C. Oren, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this,

concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and

please credit any excess fees to such deposit account.

Respectfully submitted,

FLESHNER & KIM, LLP

Mark L. Fleshner

Registration No. 34,596

David C. Oren

Registration No. 38,694

Attachments: Replacement Drawing Sheets

P.O. Box 221200

Chantilly, Virginia 20153-1200

(703) 766-3701 DCO/kah:knv

Date: AUGUST 2, 2005

Please direct all correspondence to Customer Number 34610

Reply to Office Action dated May 2, 2005

AMENDMENTS TO THE DRAWINGS

The attached drawings includes FIGS. 1-4. These sheets replace the original sheets

showing FIGS. 1-4. The replacement sheets have formalized the figures in accordance with

Patent Office procedure.

Attachment: Replacement Sheets

2